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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,611	01/08/2002	Michitaka Fukuda	2241/50458	2240
7590	10/27/2005		EXAMINER TORRES, JUAN A	
Crowell & Moring PO Box 14300 Washington, DC 20044-4300			ART UNIT 2631	PAPER NUMBER

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/937,611

Applicant(s)

FUKUDA, MICHITAKA

Examiner

Juan A. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed on 09/29/2005 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language (references AQ and AR). It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Specification

The amendments to the specification filed on 09/29/2005 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: it contains new matter in sections in pages 5 and 11. The limitations "and, on the data included in the block(s) not notified, the corresponding previous data stored in the data receiving component are used" (page 5); "At this time since the data in the other blocks are not changed, the data in the other blocks will not be transmitted" (page 11); and "That is, the block information notifying the block(s) to be transmitted is transmitted first and then the data included in the block(s) notified by the block information is transmitted, while

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the data included in the block(s) not notified is not transmitted, and the object of the present invention to improve the transfer speed can be achieved" (page 11) includes new matter that was not presented previously.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities:

In page 8 line 5 the recitation "Data reception controller 112" is improper. It is suggested to be changed to "Data transmission controller 112".

In page 15 line 14 the recitation "b122" is improper. It is suggested to be changed to "s122".

In page 15 line 14 the recitation "125" is improper. It is suggested to be changed to "s125".

In page 16 line 1 the recitation "b123" is improper. It is suggested to be changed to "s123".

In page 16 line 3 the recitation "122" is improper. It is suggested to be changed to "121".

In page 16 line 7 the recitation "130" is improper. It is suggested to be changed to "s130".

In page 18 line 14 the recitation "10" is improper. It is suggested to be changed to "S10".

In page 18 line 17 the recitation "portion 126 with urges portion 126" is improper. It is suggested to be changed to "portion 123 with urges portion 126".

In page 18 line 19 the recitation "130" is improper. It is suggested to be changed to "s130".

In page 18 line 20 the recitation "11" is improper. It is suggested to be changed to "S11".

In page 18 line 23 the recitation "12" is improper. It is suggested to be changed to "S12".

In page 19 line 2 the recitation "13" is improper. It is suggested to be changed to "S13".

In page 19 line 8 the recitation "14" is improper. It is suggested to be changed to "S14".

In page 19 line 25 the recitation "20" is improper. It is suggested to be changed to "S20".

In page 20 line 2 the recitation "21" is improper. It is suggested to be changed to "S21".

In page 20 line 11 the recitation "22" is improper. It is suggested to be changed to "S22".

In page 20 line 19 the recitation "24" is improper. It is suggested to be changed to "S24".

In page 20 line 24 the recitation "23" is improper. It is suggested to be changed to "S23".

In page 21 line 19 the recitation "30" is improper. It is suggested to be changed to "S30".

In page 21 line 24 the recitation "31" is improper. It is suggested to be changed to "S31".

In page 21 line 27 the recitation "32" is improper. It is suggested to be changed to "S32".

In page 22 line 3 the recitation "31" is improper. It is suggested to be changed to "S31".

In page 22 line 4 the recitation "33" is improper. It is suggested to be changed to "S33".

In page 22 line 6 the recitation "34" is improper. It is suggested to be changed to "S34".

In page 22 line 9 the recitation "33" is improper. It is suggested to be changed to "S33".

In page 22 line 10 the recitation "35" is improper. It is suggested to be changed to "S35".

In page 25 line 25 the recitation "40" is improper. It is suggested to be changed to "S40".

In page 25 line 27 the recitation "41" is improper. It is suggested to be changed to "S41".

In page 26 line 3 the recitation "42" is improper. It is suggested to be changed to "S42".

In page 26 line 7 the recitation "41" is improper. It is suggested to be changed to "S41".

In page 26 line 9 the recitation "43" is improper. It is suggested to be changed to "S43".

In page 26 line 11 the recitation "44" is improper. It is suggested to be changed to "S44".

In page 26 line 20 the recitation "43" is improper. It is suggested to be changed to "S43".

In page 26 line 22 the recitation "46" is improper. It is suggested to be changed to "S46".

In page 26 line 25 the recitation "47" is improper. It is suggested to be changed to "S47".

In page 31 line 14 the recitation "40" is improper. It is suggested to be changed to "S40".

In page 31 line 14 the recitation "47" is improper. It is suggested to be changed to "S47".

In page 31 line 15 the recitation "40" is improper. It is suggested to be changed to "S40".

In page 31 line 15 the recitation "47" is improper. It is suggested to be changed to "S47".

In page 31 line 15 the recitation "51" is improper. It is suggested to be changed to "S51".

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In page 31 line 14 the recitation "40" is improper. It is suggested to be changed to "S40".

In page 31 line 14 the recitation "47" is improper. It is suggested to be changed to "S47".

In page 31 line 17 the recitation "41" is improper. It is suggested to be changed to "S41".

In page 31 line 18 the recitation "51" is improper. It is suggested to be changed to "S51".

In page 31 line 20 the recitation "42" is improper. It is suggested to be changed to "S42".

In page 31 line 21 the recitation "42" is improper. It is suggested to be changed to "S42".

In page 31 line 22 the recitation "51" is improper. It is suggested to be changed to "S51".

In page 31 line 23 the recitation "52" is improper. It is suggested to be changed to "S52".

In page 31 line 26 the recitation "53" is improper. It is suggested to be changed to "S53".

In page 32 line 5 the recitation "55" is improper. It is suggested to be changed to "S55".

In page 32 line 7 the recitation "56" is improper. It is suggested to be changed to "S56".

In page 32 line 11 the recitation "55" is improper. It is suggested to be changed to "S55".

In page 32 line 13 the recitation "57" is improper. It is suggested to be changed to "S57".

In page 32 line 15 the recitation "54" is improper. It is suggested to be changed to "S54".

In page 32 line 16 the recitation "60" is improper. It is suggested to be changed to "S60".

In page 32 line 18 the recitation "61" is improper. It is suggested to be changed to "S61".

In page 32 line 21 the recitation "62" is improper. It is suggested to be changed to "S62".

Appropriate correction is required.

Response to Arguments

Applicant's arguments with respect to claims 6 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 1

Applicant's arguments filed on 09/29/2005 have been fully considered but they are not persuasive.

The Applicant contends, "claim 1 does recite active positive steps. For example, claim 1 recites that "time required for a data transmission based on the first mode, and time required for data transmission based on the second mode are calculated, and

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compared, and transmission of the data is achieved through the mode that is found to have less time for transmission of the data." Accordingly, because claim 1 recites steps of calculating, comparing and achieving transmission of data, it is respectfully submitted that claims 1 does in fact recite active positive steps, and accordingly, claim 1 is definite."

The Examiner disagrees and asserts, that, as indicated in the previous Office action, claim 1 is indefinite because it merely recites a use without any active, positive steps delimiting how this use is actually practiced. **Claim 1 is discloses in a narrative way and it is not clear what it is trying to achieve and how it is achieved. It is not clear what steps are claimed** (emphasis added). For these reasons and the reason stated en the previous Office Action, the rejection of claim 1 is maintained.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4, 7-9, and 14-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification doesn't describe "block(s) not notified".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 7-9 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph. Claims 1-4 and 7-9 provides for the use of a method for synchronous serial communication, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 2,4,7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation in lines 4-10 "when it is found the block(s) in which data are currently changed is (are) the same with the block(s) in which data were previously changed, a third mode is chosen under which the current block information is omitted, and the data included in the block(s) corresponding to the one(s) of the previous block information are transmitted, and, on the data for other block(s), the corresponding previous data stored in the data receiving component are used". It is vague and indefinite, it is not what the claim is trying to disclose.

Claims 5, 10-11 and 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation in lines 7 and 9-10 of claim 5 "in the least number of clock signals". It is vague and indefinite, it seems that there are more than one clock signal at the same time. It is not what the claim is trying

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to disclose. Claims 10-11 and 14-16 are rejected because they are dependent of claim 5.

Claims 12, and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation in lines 5 and 8 of claim 12 "number of clock signals". It is vague and indefinite, it seems that there are more than one clock signal at the same time. It is not what the claim is trying to disclose. Claims 20-22 are rejected because they are dependent of claim 12.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5, 6 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu (US 5376968 A).

As per claim 5 Wu discloses a storage means to store data fed by an external device (abstract; figure 2 block 90; figure 4 block 160; column 10 lines 5-60); a decision means to calculate the number of clock signals required for the transmission of said data for each of a number of transmission modes, and to decide which mode will allow the transmission of said data to occur in the least number of clock signals (abstract; figure 2 block 80; figure 4 block 152a; column 10 lines 5-44. The comparator will decide with mode of operation will need less amount of data, so it will be transmitted with least

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number of clock cycles); and an output means to choose the mode which has been decided by the decision means as allowing the transmission of said data to occur in the least number of clock signals, to read said data stored in the storage means, and to transmit said data through the communication mode thus chosen (abstract; figure 2 block 82a-82b; figure 4 block 152-152a; column 10 line 5-60. The switch 82 will select the mode with least amount of data and will allow the transmission in that mode of the store data in the frame store 90).

As per claim 6 Wu discloses a storage means to store data (abstract; figure 5 block 202; figure 6 block 218; column 10 lines 5-60); an analysis means to identify the communication mode of received data based on the received mode information (abstract; figure 5 block 208; figure 6 block 212; column 12 line 14-45); and a control means to cause the received data to be stored in the storage means according to the mode identified by the analysis means (abstract; figure 5 block 206; figure 6 block 222; column 12 lines 14-45).

As per claim 10 Wu discloses claim 5. Wu also discloses that when it is required to transmit a command which concerns with the treatment of data already transmitted, firstly transmitted is command data indicating the current data carries a command concerning with the treatment of the data already transmitted, and then transmitted is said block information from which it is possible to identify the block(s) to be treated out of the data previously transmitted (abstract; figure 1-2 blocks 58, and 80; figure 4 block 152a-152; column 9 line 418; column 10 lines 29-44; and column 11 lines 42-64).

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As per claim 11 Wu discloses claim 10. Wu also discloses the command includes at least either an invert command or a bit shift command (abstract; figure 4 block 152-152a there is only 2 options so it is a invert command; column 11 lines 42-64).

As per claim 12 Wu discloses a memory coupled to receive and store data fed by an external device (abstract; figure 2 block 90; figure 4 block 160; column 10 line 45-60; and column 11 lines 42-64); a processing unit which calculates the number of clock signals required for the transmission of said data for each of the transmission modes above, and decides which mode will allow the transmission of said data to occur in the least number of clock signals (abstract; figure 2 block 80; figure 4 block 152a; column 10 lines 5-44); and a selector unit, which selects a mode which has been decided by the processing unit, to read said data stored in the memory, and to transmit said data through the communication mode thus chosen (abstract; figure 2 block 82a-82b; figure 4 block 152-152a; column 10 lines 5-44; and column 11 lines 42-64).

As per claim 13 Wu discloses a memory which stores data (abstract; figure 5 block 202; figure 6 block 218; column 12 lines 29-45; and column 13 lines 3-11); an analysis unit which identifies a communication mode of received data based on the received mode information (abstract; figure 5 block 208; figure 6 block 212; column 12 lines 14-28; and column 12 lines 46-59); and a control unit which causes the received data to be stored in the memory according to the mode identified by the analysis unit (abstract; figure 5 block 206; figure 6 block 222; column 12 lines 14-28; and column 12 lines 56-63).

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kato (US 20050031033 A1) discloses encoding and decoding header data in picture signal transmission. Welborn (US 5649074 A) discloses data compression technique which utilizes constant length control words for all data compression encoding.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres
10-24-2005


KEVIN BURD
PRIMARY EXAMINER